

Title (en)

Polymer compositions having improved homogeneity and odour, a method for making them and pipes made thereof

Title (de)

Polymerzusammensetzungen mit verbesserter Homogenität und verbessertem Geruch, Verfahren zu deren Herstellung und daraus hergestellte Rohre

Title (fr)

Compositions polymères disposant d'une homogénéité et odeur améliorées, leur procédé de fabrication et tuyaux fabriqués à partir de ces compositions

Publication

**EP 2130859 A1 20091209 (EN)**

Application

**EP 08010009 A 20080602**

Priority

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Abstract (en)

The present invention deals with polymer compositions suitable for making pipes. The compositions comprise a multimodal copolymer of ethylene and one or more alpha-olefins having from 4 to 10 carbon atoms wherein the multimodal ethylene copolymer has a density of from 924 to 960 kg/m<sup>3</sup>, a melt index MFR 5 of from 0.5 to 6.0 g/10 min, a melt index MFR 2 of from 0.1 to 2.0 g/10 min and a shear thinning index SHI 2.7/210 of from 2 to 50. The compositions further have a level of volatile compounds of at most 100 ppm by weight and/or a homogeneity rating of at most 3. In addition the multimodal copolymer comprises: (A) from 35 to 60 % by weight, based on the combined amount of components (A) and (B), of a low molecular weight ethylene polymer selected from ethylene homopolymer and a copolymer of ethylene and one or more alpha-olefins having from 4 to 10 carbon atoms and having a weight average molecular weight of from 5000 to 100000 g/mol and a density of from 945 to 975 kg/m<sup>3</sup>; and (B) from 40 to 65 % by weight, based on the combined amount of components (A) and (B), of a high molecular weight copolymer of ethylene and one or more alpha-olefins having from 4 to 10 carbon atoms and having a weight average molecular weight of from 100000 to 1000000 g/mol and a density of from 890 to 935 kg/m<sup>3</sup>.

IPC 8 full level

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CPC (source: EP US)

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C-Set (source: EP US)

1. **C08L 23/06 + C08L 2666/06**
2. **C08L 23/0815 + C08L 2666/06**

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